AMENDMENTS TO THE CLAIMS

1. (Currently amended) A method ~~Process~~ for displaying a ~~the~~ mean modulation error ratio MER_{RmS} of an orthogonal frequency division and multiplexing (OFDM) multicarrier signal, the method comprising the steps of: ~~characterized in that~~

a) calculating, for each current modulation symbol I of each individual carrier k of the multicarrier signal, the square m_k of the error vector ~~is calculated in accordance with the equation~~ according to:

$$m_k = |\text{error vector}_k|^2$$

b) setting off ~~this value~~ M_k ~~is set off~~ against ~~the~~ contents of a memory location of a first memory that is ~~(A2)~~ associated with the same carrier k, ~~which~~ the first memory having ~~has~~ as many memory locations as the OFDM signal has carriers, ~~in accordance with the equation~~ according to:

$$\cancel{A2_{k,1+1} = \frac{(A2_{k,1} \cdot 1 + m_k)}{(\ell + 1)}}$$

$$A2_{k,\ell+1} = \frac{(A2_{k,\ell} \cdot \ell + m_k)}{(\ell + 1)}$$

wherein

~~$A2_{k,1+1}$~~ $\underline{A2_{k,\ell+1}}$ is ~~the~~ a new measured value (instant ~~1+1~~ ℓ+1) ~~which~~ that is to be stored in memory location k of the first memory A2,

~~$A2_{k,1}$~~ $A2_{k,\ell}$ is a ~~the~~ previous measured value ~~(instant 1)~~ (instant ℓ) from memory location k of the first memory [[A2]],

m_k is a ~~the~~ current measured error square for carrier k,

k is ~~the~~ a carrier number within the OFDM spectrum, which increases with the frequency, $k = 0 \ldots K_{max}$, and

[[1]] ℓ is the number of the symbol, which increases with time, $0 \leq$ [[1]]ℓ,

c) calculating a ~~the~~ mean modulation error MER_{RmS} ~~is then calculated~~ for each carrier from ~~these~~ the values of the first memory locations ~~in accordance with the equation~~ according to:

$$MER_{RMS,k} = 100 \cdot \frac{\sqrt{A2_k}}{VM} \quad \cancel{[\%]} \ (\%)$$

where $\overline{VM}$ is a ~~the~~ square weighted mean value of the amplitudes of all ideal signal statuses of a ~~the~~ type of modulation used in each case of a carrier modulated with user data, and

d) displaying on a display device the ~~this~~ MER_{RmS} value ~~is then illustrated on~~ as a graph for each individual carrier k as an ordinate value in a graph ~~of a diagram~~ with the number of carriers as abscissa.

2. (Currently amended) The method~~Process~~ according to claim 1, wherein ~~characterized in that~~ for ~~the purpose of~~ displaying the maximum modulation error ratio MER_{MAX}, the value M_k calculated in accordance with the calculation step ~~stage~~ a) is compared with the value of a memory location of a second memory ~~(A1)~~ that is associated with the same carrier k, ~~which~~ the second memory having ~~has~~ as many memory locations as the OFDM signal has carriers, the value stored in this memory location being replaced by the current value when the current value is greater than that already stored, the method further comprising the step of:

e) calculating a ~~the~~ maximum modulation error ratio MER_{MAX} ~~is then calculated~~ for each carrier from ~~these~~ maximum values of the memory locations in accordance ~~with the equation~~ according to:

$$MER_{MAX,k} = 100 \cdot \frac{\sqrt{A1_k}}{\overline{VM}} \quad \cancel{[\%]}\ (\%)$$

wherein $\overline{VM}$ is ~~the~~ a square weighted mean value of an ~~the~~ amplitude of all ideal signal statuses of the modulation type used in each case of a carried modulated with user data, and

f) displaying on the display device the ~~this~~ MER-max value ~~is then illustrated~~ on a graph for each individual carrier k as an ordinate value in [[of]] a graph with the number of carriers as abscissa.

3. (Currently amended) ~~Process~~ The method according to claim 1, ~~characterized in that~~ wherein, in step ~~process stage~~ b), ~~according to claim 1~~ an intermediate value is initially calculated in accordance with the equation:

$$\cancel{A2'_{k,1+1} = A2'_{k,1} + m_k} \qquad A2'_{k,\ell+1} = A2'_{k,\ell} + m_k$$

where

~~$A2'_{k,1+1}$~~ $A2'_{k,\ell+1}$ is a ~~the~~ new measured value ~~(instant 1+1)~~ (instant ℓ+1), which is to be stored in memory location k of the first memory [[A2]],

~~$A2'_{k,1}$~~ $\underline{A2'_{k,\ell}}$ is ~~the~~ a previous measured value (instant [[1]] $\underline{\ell}$) from memory location k of the first memory [[A2]],

m_k is a ~~the~~ current measured error square for carrier k,

k is the carrier number within the OFDM spectrum, which increases with the frequency, k = 0... K_{max},

[[1]] $\underline{\ell}$ is the number of the symbol, which increases with time, 0 ≤ [[1]] $\underline{\ell}$,

~~and this~~ wherein the intermediate value [[A2']] is divided prior to being displayed ~~display according to process stage d)~~ by the number of symbols detected which have been counted in a separate counter ~~in accordance with the equation~~ according to:

$$\cancel{A2_{k,1} = \frac{A2'_{k,1}}{1+1}}$$

$$\underline{A2_{k,\ell} = \frac{A2'_{k,\ell}}{\ell+1}}$$

4. (Currently amended) The method ~~Process~~ according to claim 1, ~~characterized in that~~ wherein the values initially determined in percent for MER_{RMS} or ~~and/or~~ MER_{MAX} are converted prior to their

frequency-dependent graphic illustration into ~~the unit~~ dB ~~in accordance with the equation~~ according to:

$$\cancel{MER_{db} = 20.1g\left(\frac{MER[\%]}{100}\right) \quad [dB].}$$

$$MER_{db} = -20.1g\left(\frac{MER(\%)}{100}\right) \quad (dB).$$